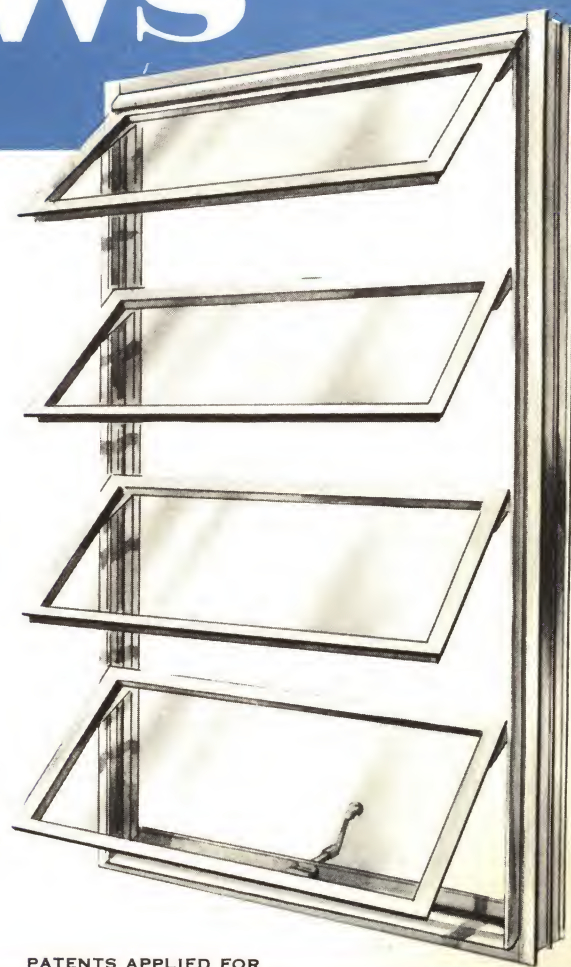
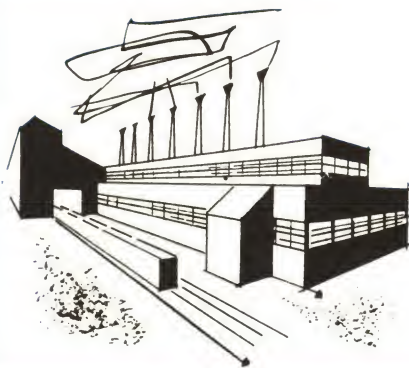
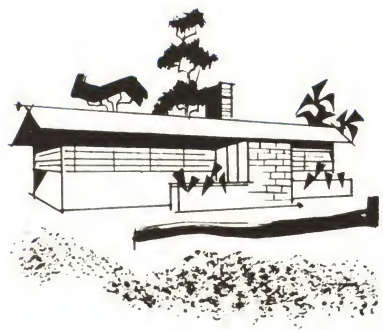
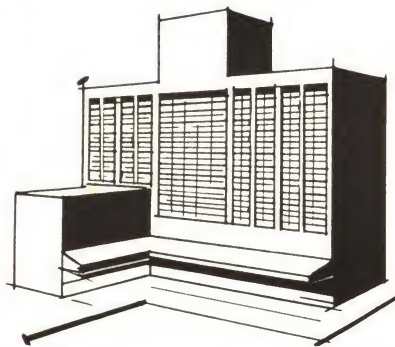


Denison *aluminum awning* Windows

A.I.A. FILE NO. 16-L



PATENTS APPLIED FOR

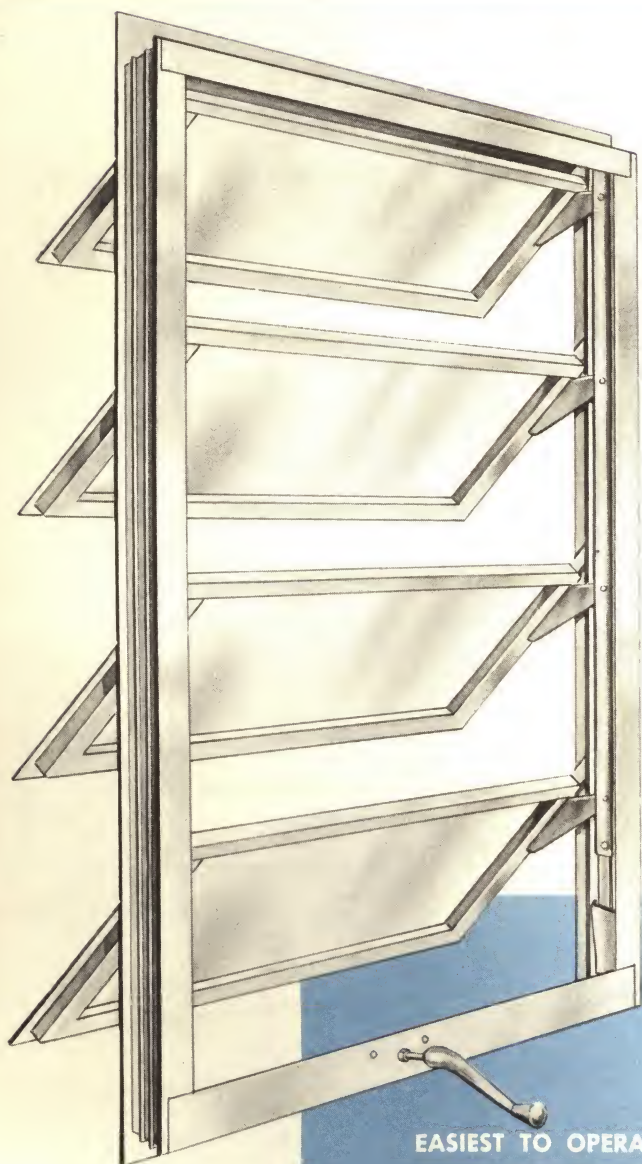
For any type of installation... In every type of building

Denison Corporation

1890 N. E. 146th Street • North Miami, Florida

Manufacturers of Jalousie Windows and

Doors and Aluminum Awning Windows



DENISON WINDOWS are designed to provide a lifetime of beauty, comfort, and protection. No other windows offer all the advantages of DENISON WINDOWS . . . their striking simplicity of design . . . rugged extruded-aluminum construction . . . complete weather protection . . . full ventilation . . . ease of operation . . . their surprisingly low cost.

EASIEST TO OPERATE



Exclusive DENISON triple-powered operator for the easiest operating window ever made.

COLD WEATHER PROTECTION



Positive weather tight closure keeps cold air out . . . warm air in . . . reduces fuel bills.

WARM WEATHER VENTILATION



Scoops air in and circulates it through the house without drafts. Opens wide for full ventilation.

FUNCTIONAL BEAUTY



Approximate twelve inch vents with full cantilever support and narrow meeting rails provide unobstructed view . . . eliminate undesirable projecting arms.

VENTILATION WHILE RAINING



Downward slant of vents and fixed hinge operation of top vent keep rain out . . . let air in.

INTERCHANGING SCREEN AND STORM SASH



When cold weather comes, screen is replaced by storm sash in a matter of seconds . . . from the inside.

EASY TO CLEAN



Just open the vents and clean both inner and outer glass surfaces from the inside.

CENTER OPERATOR



Eliminates corner operation and installation problems. Over-sill operation allows windows to be opened or closed even when venetian blinds are down.

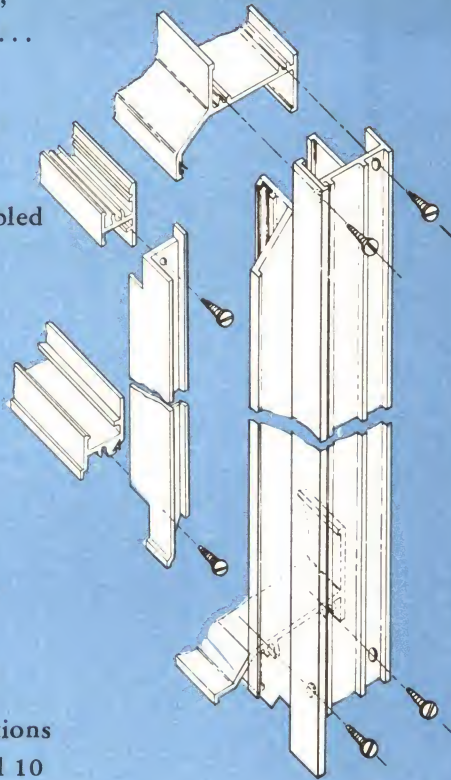
SLOPING SILL



Allows free drainage of the water to outside. No dirt traps or unsightly drain holes.

THE FIRST COMPLETELY KD (KNOCKDOWN) ALUMINUM AWNING WINDOW

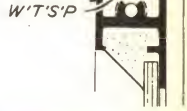
- Vent frames, as well as outer frames, shipped KD in convenient packages . . . shipped assembled if specified.
- Any width window made by simple cutting operation.
- Outer frames and vent frames assembled in seconds with screwdriver.
- Mechanism and vents can be installed after frame installation . . . prevents fouling of mechanism by plaster, etc.
- Seven KD units stored in space normally required for one assembled window.
- Center operation eliminates left and right hand window inventory . . . no corner installation problems.
- Head, picture window, and mull sections interchangeable with Denison Model 10 Jalousie . . . reduces working inventory required.



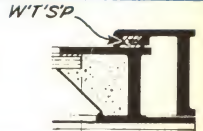
WEATHERSTRIPPING

DENISON aluminum awning windows are completely weatherstripped with extruded Elastomeric Vinyl. Weatherstripping plus double-metal-to-metal contact on jamb, sill, and meeting rails assure a perfect weathertight seal.

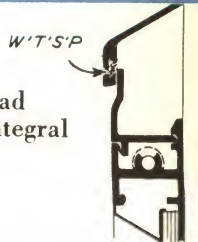
Triple weathering between vents.



Triple weathering of vent and jamb.



Weatherstripped head showing extended integral drip cap.

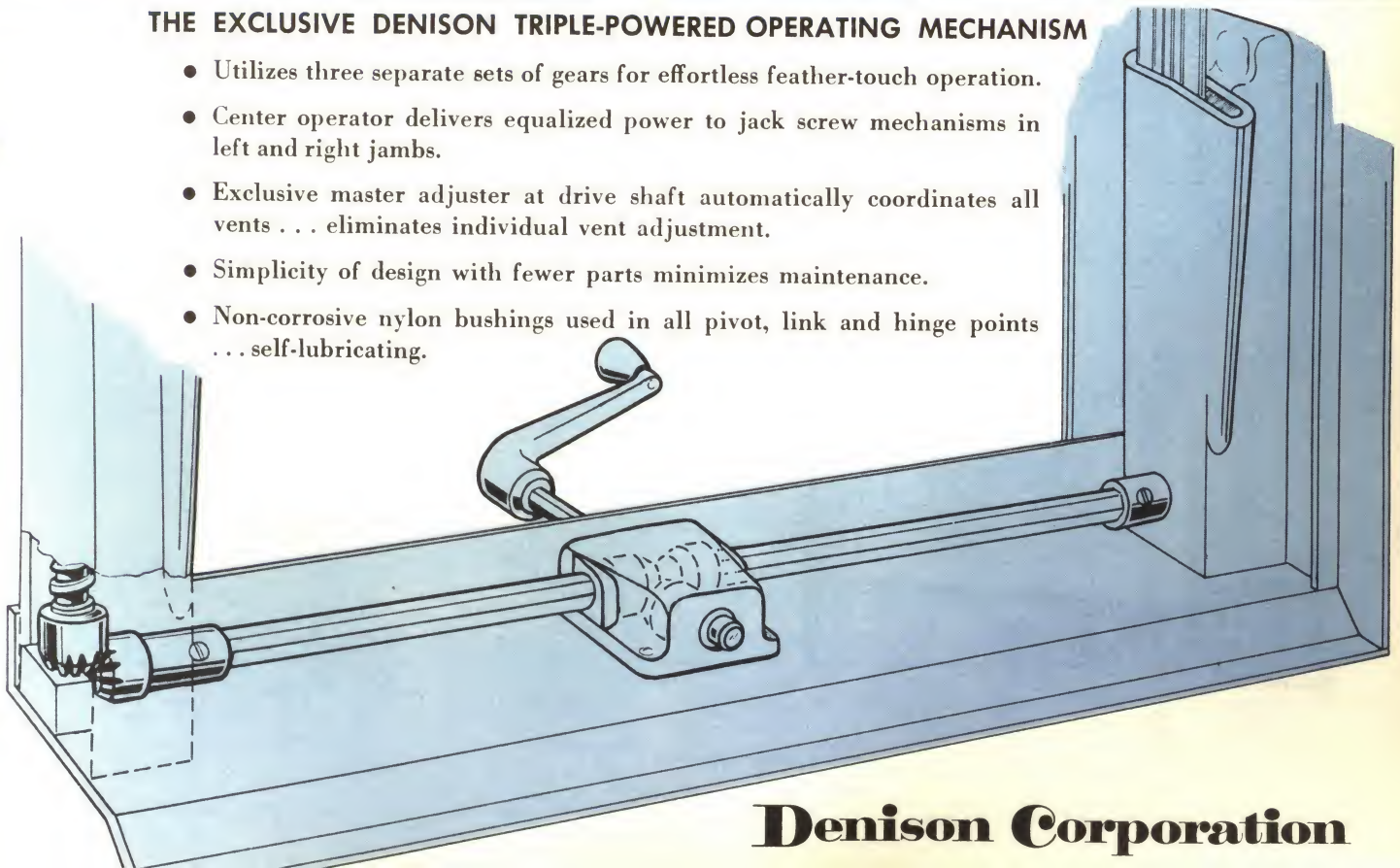


Triple weathering between bottom vent and sill showing free-draining sloping sill.

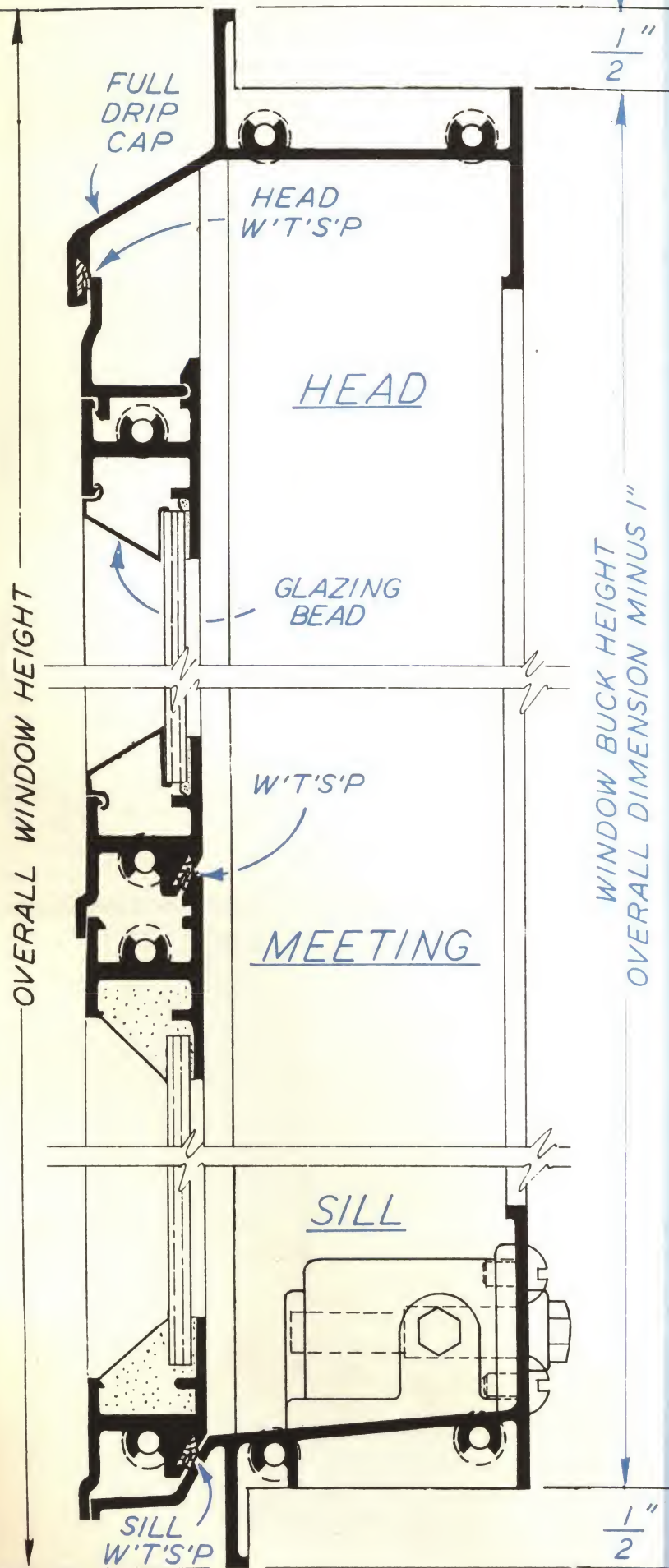


THE EXCLUSIVE DENISON TRIPLE-POWERED OPERATING MECHANISM

- Utilizes three separate sets of gears for effortless feather-touch operation.
- Center operator delivers equalized power to jack screw mechanisms in left and right jambs.
- Exclusive master adjuster at drive shaft automatically coordinates all vents . . . eliminates individual vent adjustment.
- Simplicity of design with fewer parts minimizes maintenance.
- Non-corrosive nylon bushings used in all pivot, link and hinge points . . . self-lubricating.



Denison Corporation



types and sizes

standard sizes

	19	37	53 1/4
26	A N S12	B O S22	C P S32
38 1/4	D N S13	E O S23	F P S33
50 3/4	G N S14	H O S24	J P S34
62 3/4	K N S15	L O S25	M P S35
76 3/4	N N S16	O O S26	P P S36

modular sizes

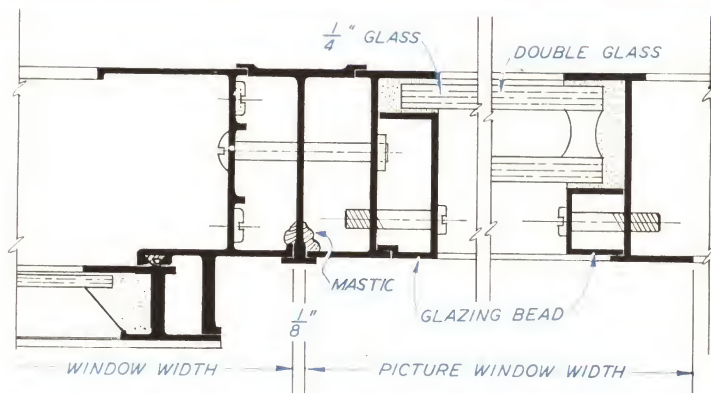
	24	32	40	48
12	1 M11	2 M21	3 M31	4 M41
24	1 5 M12	2 6 M22	3 7 M32	4 8 M42
36	1 5 M13	2 6 M23	3 7 M33	4 8 M43
48	1 5 M14	2 6 M24	3 7 M34	4 8 M44
60	1 5 M15	2 6 M25	3 7 M35	4 8 M45
72	1 5 M16	2 6 M26	3 7 M36	4 8 M46

standard glass sizes

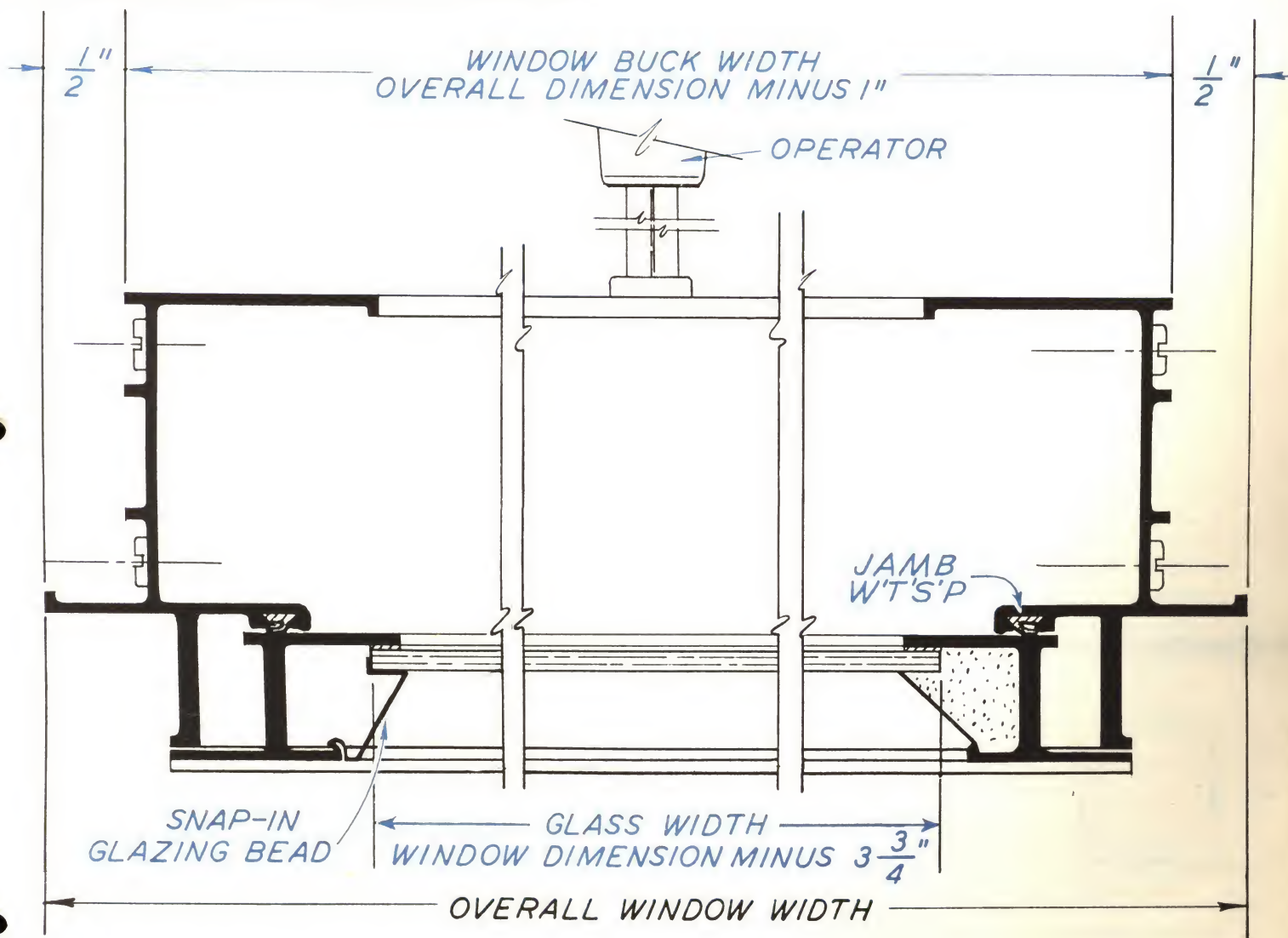
A	— 15¼ x 9⅞
B	— 33¼ x 9⅞
C	— 49⅞ x 9⅞
D	— 15¼ x 9⅞
E	— 33¼ x 9⅞
F	— 49⅞ x 9⅞
G	— 15¼ x 10¼
H	— 33¼ x 10¼
J	— 49⅞ x 10¼
K	— 15¼ x 10⅜
L	— 33¼ x 10⅜
M	— 49⅞ x 10⅜
N	— 15¼ x 10½
O	— 33¼ x 10½
P	— 49⅞ x 10½
R	— 15¼ x 12⅜
S	— 33¼ x 12⅜
T	— 49⅞ x 12⅜

modular glass sizes

1	— 20¼ x 7⅞
2	— 28¼ x 7⅞
3	— 36¼ x 7⅞
4	— 44¼ x 7⅞
5	— 20¼ x 10½
6	— 28¼ x 10½
7	— 36¼ x 10½
8	— 44¼ x 10½



typical mullion with picture window
one half full size



typical jamb section — full size

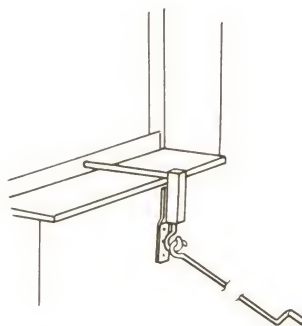
INTERCHANGEABLE SCREEN, STORM SASH

Interchangeable screens are easily replaced by storm sash in a matter of seconds . . . from the inside. Denison's exclusive swivel clip is adaptable to both screens and storm sash.

HOPPER VENT

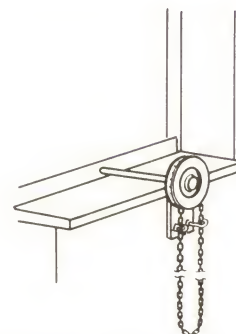
Weatherstripped Hopper vents (open-in) can be supplied in place of the bottom vent on either Standard or Modular height windows. It is closed and locked by means of one or two cam latches depending on the width of the window. Storm sash and screens are interchangeable from the inside.

POLE ADAPTER



Denison windows are easily operated when installed in high or clerestory openings by means of pole type or chain type adaptors. When ordering pole type adaptors specify the depth of the sill and the length of the pole.

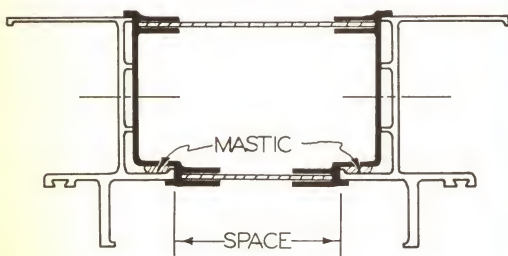
CHAIN ADAPTER



When ordering chain type adaptors specify the sill depth and the length of chain required. Normal length of chain required would be two times the height from the sill to the floor less six feet.

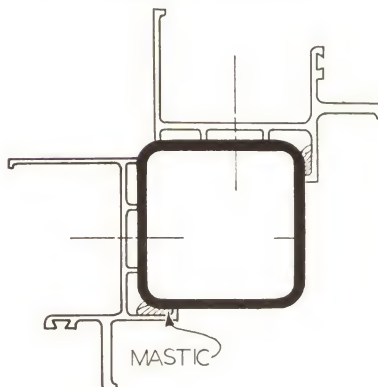
Gana operation for continuous windows can be adapted to Denison Awning Windows. Request assistance from Denison's Sales Engineering Department on special operating problems.

WIDE MULLIONS



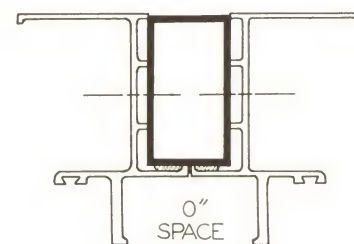
Wide mullions provide for greater flexibility in window openings making it possible to use standard width windows. This mullion is made up on order to any width up to six inches. Specify width required.

2" SQUARE MULLION



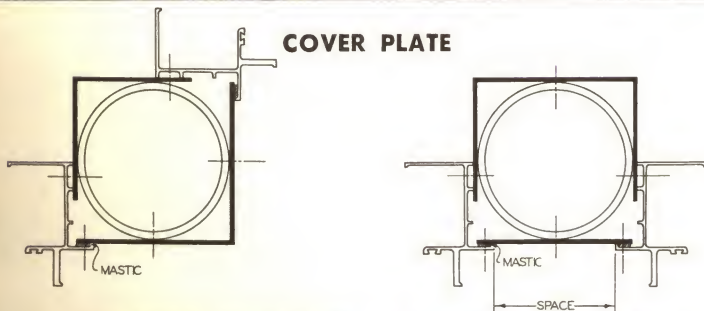
Ideally suited as corner mullion. It can also be used in a straight window run and has a mull space of 1" when used in that manner.

1" x 1 3/4" RECTANGULAR MULLION



Provides for 0 inch mull space between windows in straight window runs and is to be used when a tubular section is required instead of the standard "T".

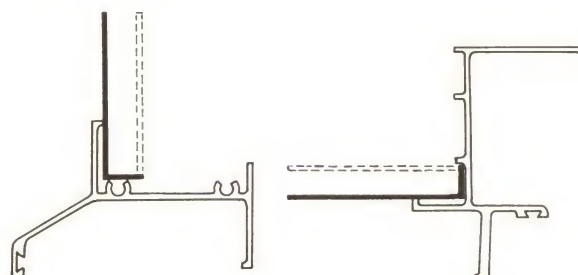
COVER PLATE



Typical standard details for corner and continuous window runs where columns require inside and outside cover plates.

When ordering specify the outside diameter of the pipe column and its use . . . corner or straight runs. Inside and outside cover plates will be furnished unless specified otherwise. Submit a sketch of your requirements for unusual conditions.

2" or 3" METAL FINS



Denison continuous metal fins are universal. They can be turned either way to suit job requirements. Head and jamb installations are shown. When ordering, specify window size on which they are to be used.

GENERAL: Windows are to be aluminum awning windows as manufactured by Denison Corporation, North Miami, Fla.

MATERIAL: All frame and vent members shall be 63S-T5 or suitable aluminum alloy. Jamb frames to have minimum depth of $2\frac{3}{4}$ " and thickness of $1/16$ " minimum with forward flanges $1/8$ " thick. Head and sill members to be deep sections — the head member shall be over $2\frac{7}{8}$ " in depth. Vent jamb members to be $1/8$ " thick with $1/16$ " flanges (commercial tolerances observed). Hinges and brackets to be die cast of high strength zinc alloy No. 5.

CONSTRUCTION: The windows shall be assembled in a secure and workmanlike manner to assure weathertight construction. Triple weathering of window to be accomplished by two metal-to-metal contacts plus one weather-strip seal using elastomeric vinyl around the vents. Weatherstripping to be concealed and away from outside weathering elements.

OPERATION: Opening and closing of window to be accomplished by triple unit operator as manufactured by Denison Corporation and under its specifications. The adjusting crank is to be of the over-the-sill type and located in the center of the sill. Two equal length drive shafts to transmit turning energy to individual jack-screw power units in each jamb which exert equal power to both sets of jamb hardware without twisting or racking of vents. To obtain ventilation during a moderate rain the top vent shall not drop down presenting an opening for rain to enter. Maximum vertical heights of top vent to be 12" to provide for easy cleaning of outside of top glass from inside. Operator to close vents against weatherstrip, compressing it for weathering seal without the use of auxiliary latches or keepers.

HARDWARE MECHANISM: Jamb hardware mechanism shall be as manufactured by Denison Corporation. The hardware mechanism in each jamb shall be driven individually by its own jack-screw operator to eliminate torque, rack or twist and to eliminate transmitting power from one side of window to the other through the vent and glass. All hinge and pivot points to have flanged bushings of nylon to reduce friction and to eliminate corrosion at these important points. The jamb frame half of all vent hinges shall be an integral part of the jamb frame to prevent misalignment and misadjustment. Rollers will not be required in hardware mechanism. The hardware shall be easily installed or removed from the window after installation.

WEATHERSTRIPPING: Windows shall be completely weatherstripped using extruded elastomeric vinyl and shall be located away from outside weathering elements.

FINISH: The finish to be a bright aluminum mill finish. (Methocrylate lacquer or anodizing where specified.)

MULLIONS: Extruded aluminum alloy 63S-T5 shall be used for all standard mullions.

SCREENS AND STORM SASH: Screens and storm sash shall be installed and removed from inside. Screens and storm sash to be interchangeable. Screens shall be 14 x 18 aluminum mesh with recessed overlapping aluminum frames. Frames shall be attached with swivel clips to permit easy removal.

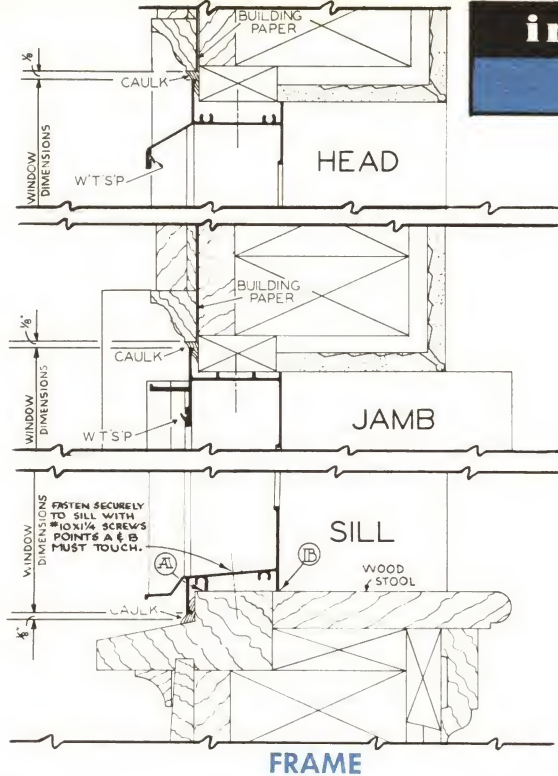
DRAWINGS AND INSTALLATION DETAILS: Upon request, the window manufacturer shall furnish standard details which show recommendations for the installation of the windows, or shop drawings if called for.

ERECTION: The erection contractor shall securely anchor windows into place in properly prepared openings. (The window frames can be erected and in place before hardware, vents, and operator are installed.) The openings must be square, plumb and level to prevent distortion of windows. The window frames shall not be distorted by erection screws or fittings and shall not interfere with the operating mechanism. Caulking, mastic, setting of window, etc. shall be in accordance with good window erection practice. When window is to be installed into a masonry opening, the erection contractor shall protect the frame from mortar and plaster by coating outside of frame with masking liquid, No. 20 oil or other suitable protective material.

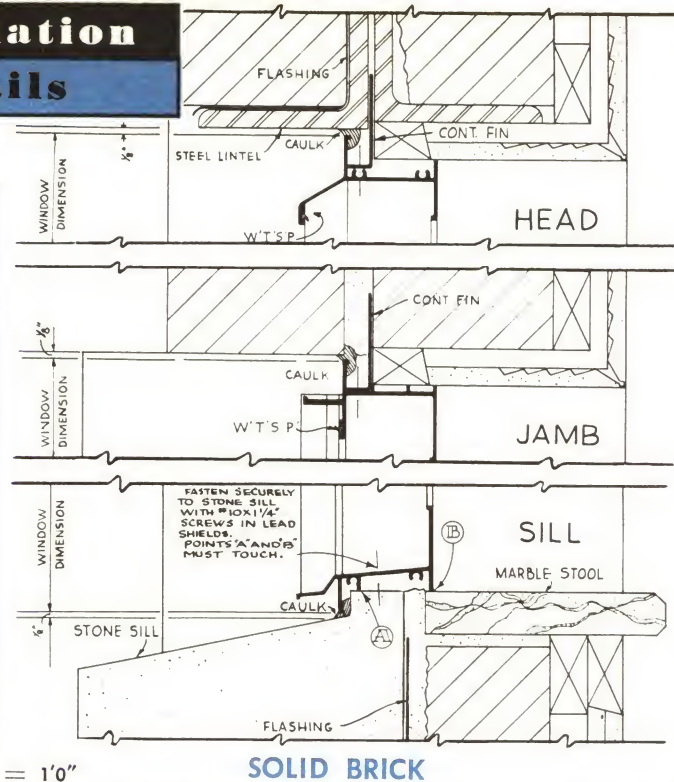
GLAZING: The glazing contractor shall use glazing compound particularly suited for use with aluminum windows and shall not require painting to protect it from deterioration. Glass shall be back bedded, clipped and face puttied in a workmanlike manner. Where glazing bead is specified, it shall be shown on drawings and as supplied by manufacturer. Caution must be taken to prevent bowing of vent heads and sills when glazing, as bowing of these members might interfere with proper operation of window.

CLEANING AFTER ERECTION: All exposed portions of the window to be cleaned, by others, to its original appearance after painting and finishing of the building.

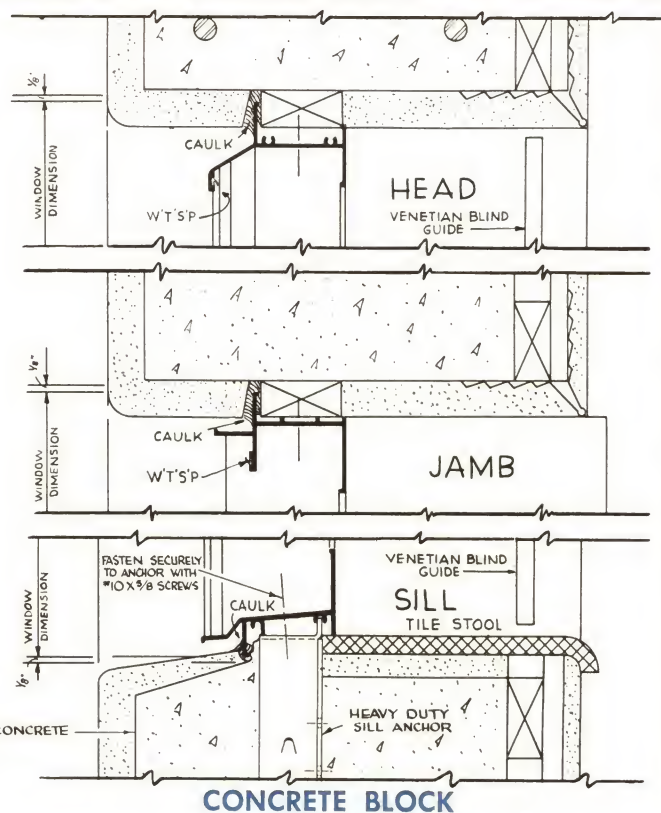
installation details



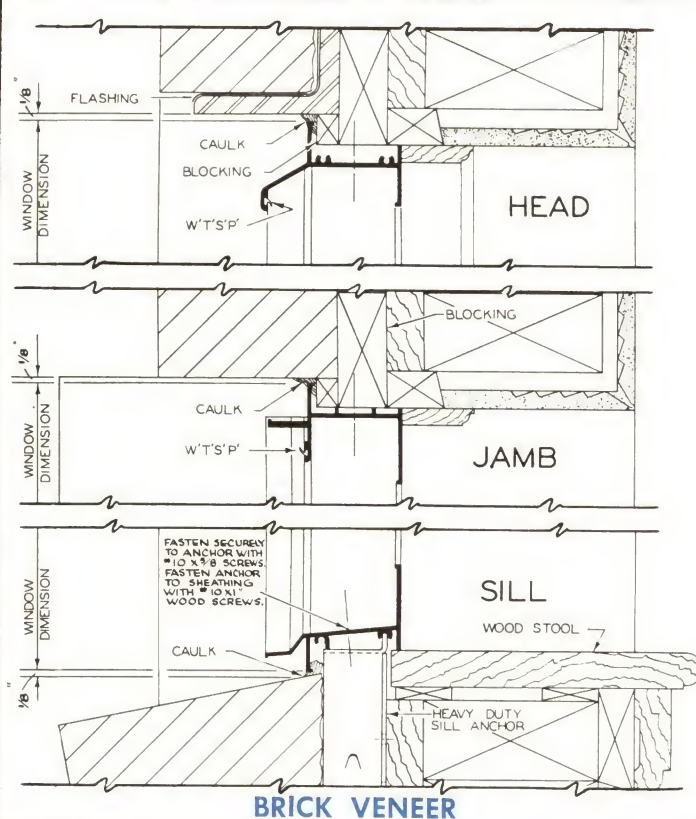
SCALE: 3" = 1'0"



SOLID BRICK



CONCRETE BLOCK



BRICK VENEER

Denison aluminum awning windows come complete with hardware for center, sill operation. Standard Anchor clips are furnished for sill. Extra long length installation screws are furnished and are to be used when Standard Anchor is not used. A special sill anchor is available for poured concrete sills and brick veneer. Be sure to specify when ordering. Standard installation screws for head and jambs are furnished with all sash. Continuous metal fins for head and jambs are available and will be furnished when specified as extras. (Caulking, mastic, flashing, special trim, glass, putty, and glazing are to be furnished by others.) Consult our Sales Engineering Department for assistance on special installation details and problems.

Denison Corporation

General Offices: 1890 N. E. 146th Street, North Miami, Fla.

Plants: Canada • Cuba • Dominican Republic

Warehouses: Houston, Texas • Los Angeles, California

In Florida ... It's Weathermaster

